

Features

- rugged welded case, hermetic
- other standard and custom PLP models available with wide selection of fco

Applications

- test equipment
- lab use
- transmitters/receivers
- military/hi-rel applications

HT-PLP-550+



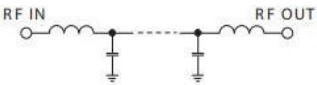
50Ω DC to 520 MHz

Maximum Ratings

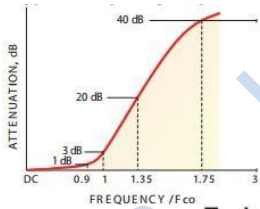
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input*       | 0.5W max.      |

Permanent damage may occur if any of these limits are exceeded.

electrical schematic



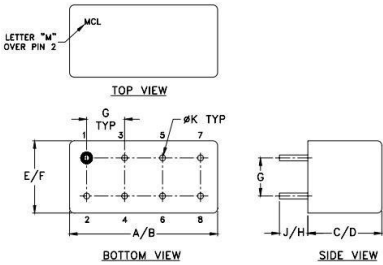
typical frequency response



Pad Connections

|             |             |
|-------------|-------------|
| INPUT       | 1           |
| OUTPUT      | 8           |
| GROUND      | 2,3,4,5,6,7 |
| CASE GROUND | 2,3,4,5,6,7 |

Outline Drawing



Outline Dimensions: Unit ( mm )

|   |       |    |       |     |       |
|---|-------|----|-------|-----|-------|
| A | 19.56 | B  | 20.32 | C   | 9.78  |
| D | 10.16 | E  | 9.40  | F   | 10.16 |
| G | 5.08  | H  | 5.08  | J   | 3.56  |
| K | 0.79  | wt |       | 5.2 |       |

Low Pass Filter Electrical Specifications (T<sub>AMB</sub>= 25°C)

| PASSBAND<br>(MHz) | fco (MHz)<br>Nom. | STOPBAND<br>(MHz) |              | VSWR<br>(:1)     |                  |
|-------------------|-------------------|-------------------|--------------|------------------|------------------|
|                   |                   | (Loss>20dB)       | (Loss>40dB ) | Passband<br>Typ. | Stopband<br>Typ. |
| (loss < 1 dB)     | (loss 3 dB)       |                   |              |                  |                  |
| DC-520            | 570               | 750-920           | 920-2000     | 1.7              | 18               |

Typical Performance Data at 25°C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) |     | Return Loss<br>(dB) | Frequency<br>(MHz) | Group Delay<br>(nsec) |
|--------------------|------------------------|-----|---------------------|--------------------|-----------------------|
|                    | X                      | σ   |                     |                    |                       |
| 10.00              | 0.02                   | 0.1 | 44.6                | 10.00              | 1.55                  |
| 152.50             | 0.10                   | 0.1 | 28.0                | 80.00              | 1.61                  |
| 222.50             | 0.15                   | 0.1 | 28.8                | 152.50             | 1.61                  |
| 295.00             | 0.27                   | 0.1 | 18.0                | 222.50             | 1.61                  |
| 365.00             | 0.38                   | 0.1 | 15.3                | 295.00             | 1.75                  |
| 437.50             | 0.36                   | 0.1 | 19.6                | 365.00             | 1.93                  |
| 520.00             | 0.57                   | 0.1 | 20.4                | 437.50             | 2.32                  |
| 550.00             | 0.75                   | 0.1 | 12.7                | 520.00             | 2.99                  |
| 570.00             | 1.17                   | 0.3 | 9.2                 | 540.00             | 3.34                  |
| 580.00             | 1.68                   | 0.4 | 2.3                 | 550.00             | 3.66                  |
| 620.00             | 7.07                   | 1.1 | 0.2                 | 570.00             | 4.37                  |
| 720.00             | 26.51                  | 1.6 | 0.3                 | 580.00             | 4.59                  |
| 730.00             | 28.52                  | 1.6 | 0.3                 | 600.00             | 4.68                  |
| 740.00             | 29.95                  | 1.6 | 0.4                 | 620.00             | 3.72                  |
| 750.00             | 31.57                  | 1.6 | 0.4                 | 650.00             | 2.39                  |
| 760.00             | 33.24                  | 1.7 | 0.3                 | 720.00             | 2.08                  |
| 800.00             | 39.85                  | 1.9 | 0.2                 | 730.00             | 0.04                  |
| 870.00             | 50.78                  | 2.4 | 0.2                 | 740.00             | 0.99                  |
| 900.00             | 55.60                  | 2.9 | 0.2                 | 750.00             | 0.81                  |
| 910.00             | 58.10                  | 4.7 | 0.2                 | 760.00             | 0.89                  |
| 920.00             | 59.19                  | 4.2 | 0.2                 | 780.00             | 1.49                  |
| 1147.50            | 68.70                  | 3.0 | 0.1                 | 800.00             | 1.71                  |
| 1290.00            | 68.19                  | 3.5 | 0.1                 | 850.00             | 2.48                  |
| 1430.50            | 69.02                  | 4.4 | 0.1                 | 870.00             | 2.81                  |
| 1572.50            | 75.22                  | 5.7 | 0.1                 | 900.00             | 1.61                  |
| 1715.00            | 73.18                  | 5.2 | 0.1                 | 910.00             | 0.91                  |
| 1787.50            | 71.84                  | 3.4 | 0.1                 | 920.00             | 0.83                  |
| 1857.50            | 71.84                  | 3.7 | 0.1                 | 1147.50            | 0.80                  |
| 1930.00            | 71.84                  | 6.9 | 0.1                 | 1217.50            | 0.73                  |
| 2000.00            | 68.82                  | 2.1 | 0.1                 | 1290.00            | 0.65                  |

